

CLAIMS

1. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine characterized in that, when the temperature of the catalytic apparatus arranged in the engine exhaust system is higher than a predetermined temperature in a vehicle deceleration, a fuel-cut of the engine is prohibited and a first motor-generator connected with the vehicle drive shaft is operated as a generator to charge an electrical accumulator.

2. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to claim 1, characterized in that when said fuel-cut is prohibited, said engine operates such that the torque of the output shaft of said engine becomes 0.

3. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to claim 1 or 2, characterized in that when said fuel-cut is prohibited, a down-shift of an automatic transmission elevates the engine speed.

4. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to claim 1 or 2, characterized in that when said fuel-cut is prohibited, a second motor-generator connected with the output shaft of the engine is operated as a motor to elevate the engine speed.

5. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to claim 4, characterized in that said second motor-generator uses the electrical energy stored in said electricity accumulator.

6. A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to any one of claims 1-5, characterized in that when an amount of charge in said electricity accumulator reaches a predetermined value, the operation of said first motor-generator, as a generator, is stopped and a

fuel-cut starts in said engine.

- 5        7.    A device for restraining the deterioration of a catalytic apparatus of an internal combustion engine according to claim 1 or 2, characterized in that when an amount of charge in said electrical accumulator reaches a predetermined value, the operation of said first motor-generator as the generator is stopped and said engine operates in a condition in which an amount of intake air is minimized but such that said engine is not stopped.